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ANNUAL REPORT

1931

SEQUOIA NATIONAL PARK

John R. White, Superintendent,
Sequoia National Park, California.

THE PAST YEAR

This is my twelfth annual report as superintendent of the Sequoia National Park. The past year has been one of continued progress, and has seen a larger construction program than at any time in the park history. The steady increase of travel has been maintained despite the general depression. A total of 143,573 visitors entered, or an increase of 11.1% over 1930.

Again we passed all travel records of previous years when on July 4, there entered the park 1382 cars and 4938 visitors.

Steady progress was made in the all-year development of the park and winter sports, so that it is no uncommon thing for several hundred visitors to enter the park in one day during the off-season months.

Major road construction has carried the Generals' Highway to Suwanee Creek, about 9 miles beyond Giant Forest, and within two years we should have the road connected through to the northwest park boundary beyond Dorst Creek; when many new problems of through travel and new campgrounds will arise.

Trail construction went ahead with 16-3/4 miles of high class trail built during the year. Owing to special precautions, no serious accident occurred.

The severe drought of the past few years still continues, and has brought about many problems of water supply, camping, and feed for stock. The Alder Creek water supply at Ash Mountain Headquarters is insufficient, and we must look forward to its enlargement.

The public operators had a fairly successful season, considering the general depression and the fact that resorts throughout the mountains of California were either closed or suffering heavy losses. There were practically no complaints, and such minor ones as came in were quickly adjusted by General Manager Mauger.

The principal need of the park continues to be long range planning and determination of the areas which should be permanently allotted for operators' developments. Every year increasing crowds further tarnish the central Big Tree area at Giant Forest, which would never have been developed as hotel and camping area had there been planning in advance. The firs, pines, and lesser trees, shrubs and flowers are already withering and in time even the sturdy sequoias will give away.

We took out 270 dead fir and pine from the central area at Giant Forest this spring, and the once beautiful undergrowth of ferns and flowers is practically a thing of the past. We are not performing our duty, to hand down the park to posterity in essentially its natural state; and we cannot perform that duty until many of the present utilities are moved away from the central Big Tree area which, in any case, does not afford room for expansion or for handling the increasing travel with its demands for parking space and so forth.

For the first time in the forty-one years of the existence of the park, the Giant Forest was visited by a Secretary of the Interior, Ray Lyman Wilbur, and by a Governor of California, James Rolph, Jr.

We have had cordial assistance from Chief Engineer Kittredge, Chief Landscape Architect Vint, U. S. Public Health Service Engineer Hommon, and others from Field Headquarters or cooperative government bureaus. The inspection visits by Director Albright, Assistant Directors Demaray, Wirth, and Bryant have been most helpful.

Despite the heavy increase in travel and general park work, there has been no increase in the permanent force, and only because of the fine work and willing spirit shown by the men and women of all divisions has it been possible to record the successful season of 1931. There follows a statement under the various divisions of work.

ADMINISTRATIVE DIVISION

The permanent administrative force of seven includes Assistant Superintendent D. J. Tobin, three clerks, two telephone operators, and one storekeeper. During the summer season, three telephone operators and two laborers are temporarily engaged. No busier season has been experienced. The personnel reached its highest peak, 220 employees; larger appropriations, heavier revenues, wider planning, increased travel, applications from the great army of unemployed, and other matters threw on the administrative office more work than ever before. Readjustments in various ways relieved the pressure and no increase in force was made. The point has been reached, however, in this steady growth of operations year by year where additional summer personnel must be available in 1932.

The total of permanent appointed employees was 29, and 15 additional appointed employees were on duty during the summer. Temporary common and skilled laborers employed reached 176, giving a peak of 220 employees for the year. The Minimum number was 35. The pre-depression scale of wages was maintained, and preference was given to married local residents with dependent families. The sum of $160,386 was spent in wages, materially assisting the nearby communities which had been badly affected by the depression.

The appropriation for administration, protection, and maintenance for the fiscal year 1931 was $97,100, and $16,000 was granted for minor construction. For trail construction, $80,000 was available; and for minor road and bridge construction, $15,000. Approach road construction funds, covering work done under contract, amounted to $230,000. Fire prevention and insect control allotments reached $14,690. In all, therefore, a total of $452,790 was available for park operations.

Revenues for the year amounted to $35,754.41, a gain of 5.4% over 1930, largely explained by the increased number of automobile licenses issued.

At no time during the entire year was there any noticeable break in the steady stream of work passing through the storehouse. Winter operations started before the summer activities were completed, and there was little time available to take necessary inventories and to check on property. Approximately $60,000 worth of supplies were issued to jobs during the year, but the big task of receipt, issue, and reissue of hundreds of items of tools and equipment to and from nearly 40 stations and jobs, cannot be measured in terms of dollars. Simplified methods were worked out and aided materially in the operation of the storehouse.

Purchasing, with the accompanying jobs of contracting, vouchering, and disbursing, was well handled during the year, and like all other administrative operations showed steady growth. Excellent prices were obtained largely because of sharpened competition among dealers. Provisions were noticeably cheaper, and for the first time in many years a substantial profit on mess operations was made. Seven messes were operated during the summer. Unusually good contracts were obtained on motor fuels, forage, explosives, and packtrain service.

In addition to the regular bookkeeping and accounting, a daily cost statement on all construction activities was issued during the summer months. This proved useful in general planning and control of work.

Slightly in excess of $23,000 was spent for new equipment, but this only partially relieved our serious needs. Nothing has cramped us and hindered efficient operations as much as lack of equipment. The major items purchased during the fiscal year were:

2 Dump Trucks 3-1/2 ton
1 Dump Truck, 1-1/2 ton
9 Pickup Body Trucks, Ford
1 Indian Motorcycle
1 Tractor, 20 H.P.
1 Tractor, 35 H.P.
1 Road Grader, 10 ft.
1 Electric Generating Plant, 3 K.W.H.

The pressure of telephone and telegraph business in the Giant Forest District was relieved in July when the new three circuit pole line was put into operation. The elimination of this business from the Ash Mountain Exchange has to a large extent been offset by increased business from the Mineral King, Kern Canyon, and southern districts of the park; and the operator-clerk has been available for clerical work only at irregular times. The extension and improvement of lines, the growth in popularity of the park, the activities of road contractors, and an intensive advertising campaign by the Pacific Telephone & Telegraph Company were largely responsible for the 50% increase over last year's business.

The Act permitting the purchase for and sale to park employees of supplies and equipment was restricted in application here almost exclusively to equipment. This entailed slight additional work, but the issue of supplies would have required at least one additional employee. Even in its limited application, the Act has been of considerable benefit to employees.

The sale of non-government books by park employees was abandoned, because it was felt that park officers were subject to justifiable criticism if engaged in activities on government time which resulted in personal profit to individuals.

PROTECTION DIVISION

The Protection Division consists of Chief Ranger L. F. Cook, an Assistant Chief Ranger, and eight permanent Rangers - 10 in all, and nine temporary Rangers in the summer. We were fortunate in securing a hand-picked group of temporary men, most of them with previous experience in Sequoia. The temporary and permanent men gave fine service and worked long hours.

Despite no increase in permanent personnel, and with only one additional temporary ranger, the large increase in travel, greater use of camps, increased trail travel, and the larger program of special assignments were handled smoothly, the public cared for efficiently, and the park protected.

The various duties of this division include the registering of cars entering and leaving the park; collection of entrance fees; police protection of the public while travelling, in camp and on the trails; information regarding roads, trails, camps, and a multitude of other subjects; advice and assistance to visitors; accidents; finding lost persons and articles; much outlying trail, telephone, camp, and pasture maintenance; improvements and repairs; guiding and assisting distinguished visitors; sign posting and painting; fish planting; wild life investigation, protection and control; fire prevention and control; preparation of information and publicity material; keeping weather records; snow surveys; investigation of insect and tree disease; packing supplies; development and maintenance of a winter sports program; reports on general conditions; private lands reports and investigations; special investigations, including a complete census of the Big Trees of the park which is being carried out this year.

The Protection Division needs an increase in personnel. With rapidly increasing travel, use of camps and trail expansion, more patrol is necessary to properly protect the park. In Sequoia the problem of conservation of the Big Tree and conifer forests is possibly the most serious conservation problem confronting the National Park Service.

Fire Protection - Three lookouts and three fire patrolmen were on duty throughout the fire season to assist the Ranger Force in fire protection. At the time of writing, mid-August, luck alone has saved the park from a serious conflagration, since large fires have occurred all around us. Fires that have occurred have been quickly and efficiently extinguished, with small loss. The restriction against smoking while travelling, which has been in effect in this park for several years, has been very largely responsible for the few smoker fires in the park.

Nine miles of fire way trails were constructed, and 21 miles of fire protection trails brushed out during the year. Some equipment was purchased.

The park organization cooperated with both the Forest Service and State in the suppression of fires near the park.

The greatest need for the future is the opening up of greater areas of brush by fire trails and low standard roads, in order to speed up transportation of men and supplies to any fire that may start. The purchase of a tank fire truck is urgently needed.

MAINTENANCE AND CONSTRUCTION DIVISION

This division, under General Foreman Hugh Parkes, comprises all park maintenance and construction other than major road and trail construction, including landscaping, improvements, construction and maintenance. It embraces the General Foreman and nine permanent employees, with a maximum of 72 per diem temporary employees during the construction season, or a total of 81.

The work completed and under way is: maintaining and oiling 61 miles of road, applying 166,000 gallons of oil, costing $8,171.68; two tractors were busy keeping the Generals' Highway clear of snow during the winter; maintaining all trails and telephone lines except the lines in outpost ranger districts, which the rangers maintain; a three circuit pole telephone line was constructed from Ash Mountain to Giant Forest, in which was used 63 miles of copper wire, 1600' of underground cable, 425 poles, and other supplies, at a cost of $11,000; fences placed around tourist pastures at River Valley, Funston Meadow, Crabtree Meadow, Big Arroyo, and Kern Hot Springs, costing $500; new sprays on the sewer system at Ash Mountain, and extension of sewer and water lines to Pinewood Camp in Giant Forest, costing $1,755; two fire lookout stations constructed, one on Paradise Peak, costing $1,293.48, and one on Cahoon Rock, costing $1,418.83; additions to Administration Building $1,900.

The initial development of Lodgepole Camp (beginning) was finished and opened to the public. This consisted of clearing campsites, landscaping and protecting the trees, etc., laying 1400' of main water line, and 900' of laterals with storage tank and 2500' of supply line; and building 150 camp tables. This project cost to date $7,619. Some landscaping is yet to be done.

A vast amount of minor improvement work was done.

It is recommended that a permanent plumber and a telephone electrician are needed for this department; heavy equipment such as dump trucks, tractors, and road equipment are needed; and a crew of six men is needed as the permanent maintenance crew for road work.

EDUCATIONAL DIVISION

This division is under Park Naturalist Frank Been, who has also served as Acting Forester. He has efficiently handled both jobs under many difficulties of lack of personnel and funds.

The year has been one of real development in educational work. Two temporary Ranger-Naturalists were employed for the first time. The development, however, does not indicate an increase over past years in educational activity, as formerly a woman museum attendant was supported through private subscription, and a Ranger was loaned as an aid to the Park Naturalist; but it does indicate that this division is no longer entirely dependent upon other help for the success of its work. There is a genuine shortage of personnel, particularly in view of the fact that educational work is almost entirely limited to the Giant Forest area, whereas increased naturalist service should be made available at Lodgepole and other areas. A permanent Junior Park Naturalist is an urgent need to prepare for park development and to make possible a year round naturalist service. Although there has been a 14% increase in park travel, there has been no material increase in educational contacts as there has been no increase in naturalist employees, and the program now conducted is as heavy as three men can carry.

Because of the addition of the Ranger-Naturalist, it was possible to have a man on continuous duty at the museum, in place of a woman. The change tends to give the people a greater impression of the importance of this part of the work, and consequently results in greater appreciation. Although the museum has long since reached the limit of its capacity, and because of unsafe construction discourages the addition of exhibits, we were able to increase its attractiveness by the installation of a reference table. The exhibits were also somewhat varied by the inclusion of several displays that were added through the interest of park visitors.

Important means of lecture contacts were added through the organization of two campfire programs conducted by the Park Service. Because of inadequate personnel, the arrangement of the programs depended upon the interest of the Park Naturalist's wife and two all summer campers.

The following acquisitions were made during the year: a permanent office and work shop which is to be enlarged; a 20 guage shot gun; an increment borer; manuscript on local Indians; 100 lantern slides on miscellaneous subjects, and a piano by private subscription, for campfire programs.

The park made contact with outside agencies and educational institutions through seven lectures by the Park Naturalist, by sending representative tree specimens to five places, and by preparing Big Tree exhibits which were displayed at eight institutions. The latter resulted in a request for three permanent exhibits to be used for educational purposes.

Through the interest of Ira Clayton, and "old timer" who lived with Hale Tharp, a feature of historical significance was improved by the restoration of Tharp Log, where the first white man to enter Giant Forest made his home in a hollow, fallen sequoia tree.

FORESTRY DIVISION

This division is under Park Naturalist Frank Been. Probably the park has no greater need than a permanent Park Forester, with adequate force for the many forestry studies and development problems, for the conduct and enlargement of the forest nursery, and for the vast amount of reforestation and conservation work that should be done.

A nurseryman was employed for the Ash Mountain Nursery, and planting stock was made available for landscaping the residences of the Assistant Superintendent and General Foreman, and much of the Ash Mountain administrative area, reforesting trampled areas of Giant Forest, and for making available sequoia trees for deserving institutions and organizations. The nursery was regularly tended, so that no loss resulted from lack of care, as has been the result in past years. As a result, a supply is now being accumulated toward making limited progress in landscaping, reforestation, and restoration. It has also been possible to gather the seeds of many native plants and increase the variety of planting stock.

This development, and the consequent increased amount of planting, has made more imperative than ever the necessity for additional personnel to do the planting which is demanded, and to give the necessary care after planting.

Through the cooperation of J. M. Miller, Senior Forest Entomologist, a complete survey of the western part of the park was made of the forest insect conditions. Based upon the report of this examination, bark beetle control work was conducted in three areas of the park, but due to difficulty of access and early fire hazard conditions, the funds allotted were not sufficient to make a complete clean-up. Consequently, money will be needed for the completion of these projects, and we hope appropriations will become available each year to maintain a sanitary forest condition. The beauty of this park depends upon the preservation of its forests.

A forest insect exhibit was prepared for illustrating to the visiting Appropriations Committee the seriousness of the insect conditions and the necessity for control.

In order to observe methods and forestry practices, the Acting Park Forester visited the Forest Insect Laboratory, the nursery of the California Forest Experiment Station, and several city nurseries.

As a part of the landscape plan, and to prevent the deterioration of the Giant Forest Meadows, control work was conducted on the false hellebore, which was rapidly taking possession of the meadows and giving them a very unsightly appearance.

ENGINEERING AND MAJOR CONSTRUCTION DIVISION

ROAD CONSTRUCTION:

This division is in charge of Construction Supervisor J. H. Diehl.

Moro Rock Road - a much needed improvement was added in the fall of 1930 with the relocation and reconstruction of the Moro Rock Road, increasing the parking area at the rock, and completing the 3500' loop section. The congestion encountered previously on peak days has been relieved.

North Fork Road - about three-quarters of a mile of this road, starting at the Generals' Highway below the Old Commissary Building, was widened and graded, providing a good two-way road.

TRAIL CONSTRUCTION:

Trail of the Sequoias - most notable of the trails constructed in the Giant Forest area during the summer and fall of 1930, was the Trail of the Sequoias. Beginning at Sherman Tree and ending at the High Sierra Trail, near Log Meadow, this trail is 3.7 miles in length and traverses the east rim of the Giant Forest Big Tree area. It provides a highly scenic trail and also a bridle path connection between the Lodgepole-Wolverton area and the High Sierra Trail, without travelling the automobile highways.

High Sierra Trail - the close of the 1930 season found this trail constructed to a point nearly one mile beyond Bearpaw Meadow, a total distance, from the beginning at Crescent Meadow, of over 12 miles. The route ahead to the Hamilton Lake area is heavy construction, and the mileage for the coming season will not be so great as that of the two preceding seasons. However, a total of about five miles of this trail will be built this year.

Arroyo-Chagoopa Trail - This trail, when completed, will be a tributary of the High Sierra Trail, with a connection at Kaweah Gap. Work commenced this year in the Big Arroyo just north of the Black Rock Pass Trail crossing, and an easy grade will replace the sharp, steep, rise of the old trail to Chagoopa Plateau. From Kaweah Gap about one-half mile of trail has been constructed to the valley south of Nine Lake Basin. About two miles will be constructed this season.

Foresters Pass Section John Muir Trail - Approximately 5 miles of trail were completed through the park to Foresters Pass, where connection was made with trail construction being carried on by the Forest Service. This job will eliminate the old sections of the John Muir Trail which crossed both Shepherd and Junction Passes, each over 13,000'. The Forest Service crew did not get on the job until late in the season, and some work on its part will be necessary in 1932 to complete the project.

Moro Rock Stairway - Plans for this project were completed during the winter of 1930-31, and June 1, 1931 construction was started. It will be about 75% completed during this season.

Telephone line to Trail Camps - Twenty miles of steel core copper telephone line was strung from the Giant Forest along the line of the High Sierra Trail over Kaweah Gap (10,800') to the Black Rock Trail crossing in the Big Arroyo. This was installed to facilitate construction of trails along this route, and to expedite handling of emergency cases, including accidents. Four trail camps were connected to the system at a cost of approximately $4,000. And the superintendent and administrative officers of the park are now able to conduct business much more efficiently than heretofore.

Kern River Bridge - This is a trail bridge located across the Kern River, one-quarter mile below Chagoopa Ranger Station, and will provide a crossing for saddle and pack stock during the spring and early summer periods of high water. It will be a log structure of three spans totaling 70 feet in length, with log crib abutments and piers.

Work was not begun until the middle of August, but the piers and stringers will be in place and the job about 75% completed. Only the decking and rails will remain for completion early next year. About one-half mile of new trail on the west bank of the river will also be constructed to connect the bridge crossing with the Kern River trail just below Funston Creek.

Lodgepole Camp Bridge - This structure consists of a 40 foot steel girder span with 18 foot road width, and a 4 foot sidewalk, rubble masonry abutments, log facing and guard rail. It is located at the east end of Lodgepole campground, and has been carefully designed and constructed to harmonize with the landscape. Unforeseen concrete work will prevent its completion this fall, but it should be 75% finished.

LANDSCAPE DIVISION.

During the summer season of 1931, Francis Lange of the Landscape Division has been in the park. Assistant Landscape Architect Merel Sager has made several trips to the park, and Mr. T. C. Vint, Chief Landscape Architect, was in the park during the latter part of August.

Landscape supervision has been devoted chiefly to the Moro Rock Stairway, portions of the High Sierra Trail, all road construction between Sequoia and General Grant National Parks, including the Lodgepole Bridge, Silliman Bridge, Clover Creek Bridge and Suwanee Creek culvert, and several buildings. Mr. Sager made an inspection trip to Hamilton Lake over the High Sierra Trail during the summer.

The following construction was planned and supervised: ranger residence at Giant Forest; improvements of Superintendent's residence at Ash Mountain; comfort station at General Sherman Tree; public shower at Sunset Rock Camp; employee's residence at Ash Mountain; restoration of Tharp Log.

A considerable amount of time was given to preparing sketches and working drawings for buildings and landscaping, including those required for the superintendent's 1933 estimates.

STATISTICS

	1931		1930	
TRAVEL	CARS	VISITORS	CARS	VISITORS
By private auto	44,701	136,968	39,631	124,086
By stage		211		317
By other means		6,394		4,818
TOTAL	44,701	143,573	39,631	129,221
TRAVEL BY ENTRANCES				
Ash Mountain Station	40,787	127,527	36,205	115,616
Mineral King Road	3,914	9,652	3,426	8,787
Trail Entrances		6,394		4,818
Total	44,701	143,573	39,631	129,221
WINTER TRAVEL				
October 1 to March 31	10,087	31,486	6,393	30,208

ORIGIN OF TRAVEL (Ash Mountain Entrance)

	1931	1930	1929	1928	1927
San Joaquin Valley	67.0%	61.0%	63.7%	64.0%	62.7%
Southern California	21.5	26.0	22.8	24.2	28.1
Northern California	5.1	4.8	5.6	4.2	4.1
Other States and Foreign	6.4	8.2	7.9	7.6	5.1

	1931	1930
Number of visitors using campgrounds	59,266	32,197
Number of public campgrounds	15	15

Number of individual campsites:

Sunset Camp	40	Sunset Rock Camp	40
Paradise Camp	40	Firwood Camp	75
Moro Creek	3	Bridge Camp	40
Soldier Camp	10	Old Commissary	10
Sherman Tree Camp	18	Lodgepole Camp	140
Hospital Rock Camp	20	Potwisha Camp	25

Atwell Mill Camp	25	Hazelwood Camp	65
TOTAL			551

		1931	1930
ROADS	No. Miles	75	69
Telephone Lines	No. Miles	190	130
Trails	No. Miles	624	615-3/4

WILD LIFE	1931	1930
Bear, California Black	210	172
Deer, California Mule	4,200	5,200
Fisher	75	180
Martin	300	200
Mink	200	200
Foxes	360	360
Gray Squirrel (steady increase)	180	150
Bobcats	100	90
Coyotes	200	400
Mountain Lions	36	34
Wolverine	9	6
Mountain Beaver (encouraging increase)	19	2
Grouse	1,000	500
Quail	6,000	10,000
California Condors	-	-
Golden Eagles	12	18
Bald Eagles	4	2
Green Herons	8	8
Blue Herons	6	4
Wild Pigeons	20	200
Horned Owls	16	14

	1931	1930
REVENUES:		
All sources, fiscal year	$35,754.41	$33,923.92
Auto licenses, travel year	21,302.00	21,399.00
APPROPRIATIONS:		
Administration, Protection, Educational, Maintenance	97,100.00	95,000.00
New construction	16,000.00	25,000.00
Fire Prevention and Forest Protection	14,690.00	10,000.00
Roads & Trails (operating season) Cash	325,000.00	
COURT CASES BEFORE U. S. COMMISSIONER:		
Total Cases	12	11
Convictions	12	11
Total fines imposed	$165	$205
FISH PLANTED	250,000	155,000

	1931	1930
LIBRARY BOOKS CIRCULATED	3,492	3,071
FIRES:		
Total number inside park	16	12
Acres burned	325	5.4
Number of fires reported outside park	34	38
Cooperative work on fires outside park	(3) 41 Acres	(3) 2,254 A

PUBLIC OPERATORS: (Sequoia-Grant Parks Co.)	1931 HOUSE COUNT			1930		
	Lodge	Kaweah	Pinewood	Lodge	Kaweah	Pinewood
Month of May	539	484	305	561	351	103
" " June	1079	2534	1720	1442	2035	930
" " July	1627	5611	2208	2785	5007	1785
" " August	1518	5057	2126	2003	5457	1878
" " September	* 476	982	598	785	1409	748*
TOTALS	5239	14668	6957	7576	14259	5444
Stage Passengers - one way		301			434	
Giant Forest Winter Camp (House count September 10 - May 24)		2,795				

* Last year the Lodge was open until September 30, and this year only until September 10; and the same applies to Pinewood.